Table 2

	Before PMBV	After PMBV	3st month	1 st year	p	P1**	P2**	P3**	P4**
Systolic velocity (cm/sn)	12 (9-17)	15 (11-17)	13 (10-16)	12 (10-15)	<0,001	<0,001	<0,001	AD	AD
Early diastolic velocity (cm/s)	10 (8-14)	13 (10-16)	11 (8-16)	11 (8-15)	<0,001	<0,001	<0,001	AD	AD
late diastolic velocity (cm/s)	12 (8-16)	11 (8-16)	11 (8-15)	11 (8-15)	<0,001	<0,001	AD	AD	AD

Comparison of before and after PMBV (at 48 hours, 3 months and 1 year) Pulsed tissue Doppler imaging variables measured by Transthoracic Echocardiography

OP-066

Assessment of Left Atrial Appendage Function before and after Transcatheter Aortic Valve Implantation: Transesophageal Echocardiography Study

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Background: Aortic stenosis (AS) leads to the remodeling of left heart. Longstanding afterload increase due to AS results in compensatory concentric left ventricular (LV) hypertrophy and LV diastolic dysfunction which indirectly impair left atrial (LA) functions. The aim of this study was to evaluate the short term effects of transcatheter aortic valve implantation (TAVI) on LV diastolic and left atrial appendage (LAA) function.
Methods: Ninety-one patients with severe AS were examined during their hospital stay by echocardiography before and 3,4± 1,2 days after TAVI. Transmitral flow was acquired to obtain peak early (E) and late (A) atrial flow velocities. We used the average peak early diastolic (E') velocity obtained from the septal side of the mitral annulus in the four chamber view. 35 of the 91 patients were evaluated with transesophageal echocardiography (TEE) and LAA anterograde flow velocities were measured before and within minutes after TAVI in catheterization laboratory.
Results: The study consisted of a total of 91 consecutive patients in whom TAVI was performed. The mean age was 78.3±7.43 years. Of the 91 consecutive study patients, 63 were female (69%). The mean body mass index (BMI) was 28.3±8.6 kg/m2. The calculated mean logistic EuroSCORE was 22.3±16.2 and STS score 7.57±5.3. Baseline examination of patients revealed mean ejection fraction as 53.8%±14.4. SURTAVI risk score was low in 9 patients, medium in 29 patients and high in 48 patients. Before TAVI, mean mitral E/A velocities was 1.24±0.68 and after TAVI before hospital discharge mean mitral E/A velocities was 1.19±0.67 and this finding was statistically significant (p=0.001). There was a significant reduction in septal early diastolic velocities after TAVI compared to baseline values (0.053±0.11 vs 0.052±0.13, p=0.001). LAA anterograde flow velocities assessed by TEE in 35 of 91 patients changed significantly within minutes after TAVI (32.45±10.7 cm/s vs 47.6±12.61 cm/s p<0.001).
Conclusions: In this study, LAA anterograde flow velocities improved within minutes of TAVI suggest the early improvement of LAA and LA functions. Also, we determined the amelioration of LV diastolic functions within days after TAVI. These findings indicate that, after TAVI, there is a recovery of LV diastolic and LA functions and this recovery commences immediately.

Interventional Cardiology

OP-067

Attenuated Postimplant Anticoagulation Regime After Left Atrial Appendage Occlusion With the Watchman Device

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Background: In the PROTECT AF trial, left atrial appendage (LAA) occlusion with the Watchman® device has been proven to be non-inferior to Warfarin in preventing ischemic stroke in patients with atrial fibrillation (AF) and risk of thromboembolic events and to be superior in preventing hemorrhagic stroke. The data suggest that LAA occlusion is especially helpful in AF patients with both a high risk for thromboembolic events and for bleeding events with contraindications for oral anticoagulation. However in the PROTECT AF trial, the postimplant anticoagulation protocol was aggressive: all patients get Warfarin combined with ASS for 45 days. At 45 days follow-up, patients were put on ASS plus Clopidogrel until completion of 6 months follow-up. Afterwards a lifelong ASS therapy was recommended. Patients with contraindications for oral anticoagulation were excluded from the PROTECT AF trial. For this study the postimplant anticoagulation was attenuated in such way that patients received ASS lifelong and LMWH for 2 months.
Aim: It was the aim of this analysis to investigate whether an attenuated postimplant anticoagulation regime is safe in AF patients with high risk for thromboembolic and hemorrhagic events undergoing LAA occlusion with the Watchman device.
Methods: Patients with chronic paroxysmal or persistent AF and a CHA2DS2-VASc score (CVS) ≥3 and a HAS-BLED score (HBS) ≥3 were eligible for this study. All patients received 100mg ASS lifelong and bodyweight adapted LMWH once a day for 2 months. Follow-up visits at 2 and 6 months included TEE.
Results: 69 patients were included (mean age: 74+7y; 46 male), all of them had undergone 2 months and 66/69 6 months follow-up visit so far. The mean CVS was 4.9±1.3, the mean CHADS2-Score was 3,2±0,9, the mean HBS was 4.3±1.0. 36 patients had history of ischemic strokes and 57 patients of major bleeding events.

LAA occlusion was feasible in 68/69 patients. Periprocedural complications were a stroke without residual neurological deficit in 1 patient, a mild pericardial effusion not requiring treatment in 3 patients, and groin hematoma in 6 pat.

At 2 months follow-up, the LAA was completely sealed (leakage ≤3 mm) in all patients. One Patient showed a ball-shaped thrombus inside the LAA, LMWH was discontinued in all patients than this one. No stroke or TIA had occurred. Neurological examination did not reveal any new abnormal findings. One patient died from endocarditis, one patient from intestinal ischemia.

At 6 months, 1 patient had experienced a TIA No other patient had any sign of stroke or peripheral embolism. One patient died from noncardiac reason. So, the incidence of TIA, stroke or peripheral embolism during the first 6 months post implantation was very low (2/68).
Conclusion: These results suggest that in AF patients with high risk for thromboembolic and bleeding events implantation of the Watchman LAA occlusion device can be performed safely with an attenuated postimplant anticoag. protocol.

Hypertension

OP-068

Efficacy and Safety of Renal Denervation: Outcomes of the Largest Series of Renal Denervation in Turkey

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Introduction: Renal denervation is a new promising treatment option which is performed in patients with resistant hypertension defined as blood pressure that remains above goal despite lifestyle measures and concurrent use of 3 antihypertensive agents of different classes, prescribed at optimal doses, including a diuretic. Overall, observational studies and clinical trials suggest that 8%-30% of treated hypertension patients have resistant hypertension. Here, we report outcomes of the largest series of renal denervation in Turkey.
Method: 29 patients with resistant hypertension who had undergone renal denervation procedure were included in our study. Average age of patients were 51.7±8.3, systolic and diastolic blood pressures were 177.3±16.8 and 97.5±12 mmHg, respectively. Under local anesthesia, a 6 French introducer sheath was inserted into the right femoral artery using the standard percutaneous technique. A heparin bolus was then administered for anticoagulation. A 6 French double-curve RDC or IMA guiding catheter using no-touch technique was used for cannulation of ostiums of renal arteries. Nitroglycerin was directly injected into the arteries to avoid spasm. Then, a specially designed and commercially available radiofrequency ablation catheter (Symplicity, Medtronic) was positioned a little bit proximal to the bifurcation of the main renal arteries under fluoroscopy. Ablation was initiated according to a pre-specified protocol lasting up to 120 seconds and of 8 watts or less. Midazolam, morphin, fentanyl or pethidin HCL infusion was used as the sedative or analgesics needed.
Results: Procedure times were 40-45 minutes depending on the length of renal arteries. During procedures, renal artery spasm developed in 5 patients. It resolved in 4 patients after a bolus of nitroglycerin. But, in one patient multiple spasms resistant to nitroglycerin and compromising blood flow developed. In 1 patient symptomatic hypotension was seen. No any other local or systemic complication observed in the rest. Blood pressures were measured before and after procedures and also in 1, 3, 6, 9 and 12 months after procedures. An average systolic and diastolic blood pressure reduction of 24±5 mmHg and 13±4 mmHg at 12 months were observed respectively.
Discussion: In spite of hesitation in our country, our findings suggest that catheter-based renal denervation is an attractive, safe and effective treatment option in patients with resistant hypertension.